

PENDING CLAIMS AND STATUS THEREOF

Claims 1-17. (previously canceled)

18. (previously presented): A method of communication using an encoder microchip and a decoder microchip, said method comprising the steps of:

storing a first identification number in an encoder microchip;

storing a counter value in the encoder microchip;

changing the counter value when the encoder microchip is operated;

non-linearly encoding the counter value with the first identification number;

generating a transmission value from the nonlinearly encoded counter value;

storing a second identification number in a decoder microchip;

receiving the transmission value;

decoding the transmission value with the decoder microchip and the second identification number;

generating a present decoded counter value from the decoded transmission value;

storing a previously decoded counter value from a previous transmission; and

scanning the received transmission value to determine if it conforms to a specific format.

19. (previously presented): A method for encoding a transmission value using an encoder microchip, said method comprising the steps of:

storing an identification number in an encoder microchip;

storing a counter value in the encoder microchip;

changing the counter value when the encoder microchip is operated; and

non-linearly encoding the counter value with the first identification number to generate a transmission value that is decodable to provide the counter value.

20. (previously presented): The method of claim 19, wherein the identification number is used in the step of decoding the transmission value.

21. (previously presented): The method of claim 19, further comprising the step of transmitting a radio frequency signal having the transmission value.

22. (previously presented): The method of claim 19, further comprising the steps of:
forming a unit number selected from the group consisting of information representing a command, information representing an input value, information representing a transmitter number and a constant value; and
non-linearly encoding the counter value and the unit number with the identification number to generate the transmission value.

23. (previously presented): The method of claim 22, wherein the step of non-linearly encoding generates the transmission value decodable to provide the counter value and the unit number.

24. (previously presented): A method for decoding a transmission value using an decoder microchip, said method comprising the steps of:
storing an identification number;
storing a first counter value;
receiving a transmission value;

decoding the received transmission value with the identification number to generate a second counter value;

comparing the second counter value with the first counter value;

activating an output if the comparison of the second counter value with the first counter value is within a defined range; and

storing information relating to the second counter value when the output is activated.

25. (previously presented): The method of claim 24, further comprising the step of scanning the received transmission value for identifying and acting when the transmission value is in a valid format.

26. (previously presented): The method of claim 24, wherein the output, when activated, provides an indication of information contained in the decoded transmission value.

27. (previously presented): The method of claim 24, wherein the output is activated only when the second counter value is within a forward range of the first counter value.

28. (previously presented): A method of communication using an encoder microchip and a decoder microchip, said method comprising the steps of:

storing an identification number in an encoder microchip;

storing a counter value in the encoder microchip;

changing the counter value each time the encoder microchip is operated;

nonlinearly encoding the counter value with the identification number;

generating a transmission value from the nonlinearly encoded counter value;

changing the changed counter value after a given period of time subsequent to the encoder microchip being operated, wherein if the encoder microchip is operated more than once during the given period of time, the counter value is only changed once;

storing a second identification number in a decoder microchip;

receiving the transmission value;

decoding the transmission value with the decoder microchip and the second identification number;

generating a decoded counter value from the decoded transmission value;

storing a second decoded counter value obtained from the decoding of a previous transmission value;

changing the stored second decoded counter value after a period of time subsequent to each time the decoder microchip receives a transmission value; and

scanning the received transmission value to determine if it conforms to a specific format.

29. (previously presented): A method for encoding a transmission value using an encoder microchip, said method comprising the steps of:

storing an identification number in an encoder microchip;

storing a counter value in the encoder microchip;

changing the counter value when the encoder microchip is operated;

encoding the counter value with the identification number to generate a transmission value; and

changing the changed counter value after a period of time subsequent to the encoder microchip being operated.

30. (previously presented): The method of claim 29, further comprising the step of transmitting a radio frequency signal having the transmission value.

31. (previously presented): A method for decoding a transmission value using an decoder microchip, said method comprising the steps of:

storing an identification number in a decoder microchip;

storing a first counter value;

receiving a transmission value;

decoding the received transmission value with the identification number to generate a second counter value;

comparing the second counter value with the first counter value;

activating an output if the comparison of the second counter value with the first counter value is within a defined range;

storing information relating to the second counter value when the output is activated; and

changing the second counter value after a period of time subsequent to the step of receiving the transmission value.

32. (previously presented): The method of claim 31 wherein the step of activating the output is performed only when the second counter value is within a forward range of the first counter value.

33. (previously presented): The method of claim 31, further comprising the step of storing a plurality of counter values, each being related to a different encoder microchip.

34. (previously presented): A method of remote control using a transmitter and a receiver, the method comprising the steps of:

storing a first identification number in a transmitter;

storing a counter value which is related to a number of times the transmitter is activated;

encoding the first identification number and the counter value to generate a transmission value;

transmitting the transmission value and indicating an activation of the transmitter to a user;

changing the stored counter value after a period of time subsequent to transmitter activation;

storing a second identification number in a receiver, the second identification number being the same as the first identification number;

receiving the transmission value with the receiver; and

performing a decoding function on the received transmission value with the second identification number so as to generate a decoded counter value.